

WHAT IS CLAIMED IS:

1. A stereoscopic image display apparatus, comprising:
a display device displaying a plurality of parallax
5 images by different pixels; and

an optical separating member in which a plurality of
state-selective regions are lined up, which have properties
of selectively transmitting light with different states,
the optical separating member directing, of the light from
10 the pixels, the light transmitted through the state-
selective regions to a different viewing region for each
parallax image.

2. The stereoscopic image display apparatus according to
15 claim 1,

wherein the plurality of state-selective regions in
the optical separating member are lined up in a first
direction, and the light transmitted through the state-
selective regions is directed to different viewing regions
20 in the first direction for each parallax image.

3. The stereoscopic image display apparatus according to
claim 2,

wherein a plurality of first direction rows of the
25 state-selective regions are arranged in the optical
separating member in a second direction perpendicular to
the first direction; and

the stereoscopic image display apparatus further comprises an optical member projecting light from a first predetermined position in the display device, which is a position along the second direction, onto a second
5 predetermined position in the state-selective regions, which is a position along the second direction.

4. The stereoscopic image display apparatus according to claim 3,

10 wherein a projection magnification of the optical control member in the second direction onto the optical separating member with respect to the display device is larger than 1.

15 5. The stereoscopic image display apparatus according to claim 3,

wherein the state-selective regions in the optical separating member are arranged such that positions of state-selective regions belonging to different rows of the
20 first direction rows of the state-selective regions and having different properties do not overlap in the second direction.

6. The stereoscopic image display apparatus according to
25 claim 1,

wherein the plurality of state-selective regions have properties of selectively transmitting light with different

polarization states.

7. The stereoscopic image display apparatus according to claim 1,

5 wherein the plurality of state-selective regions have properties of selectively transmitting light with different wavelength regions.

8. The stereoscopic image display apparatus according to
10 claim 1,

wherein the plurality of state-selective regions have properties of selectively transmitting light with different polarization states and different wavelength regions.

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